Appl. No. 10/020,313 Amendment dated September 12, 2005 Reply to Office Action of June 14, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions and listing of claims in the application.

Listing of Claims:

1-34. (Canceled)

35. (Currently Amended) A storage system to be coupled to an IP network, said storage system comprising:

a physical input/output port to be coupled to the IP network;

a control unit coupled to the physical input/output port; and

a plurality of disk drives coupled to the control unit,

the physical input/output port being assigned with accessible by a block I/O request having a first port number for receiving a block I/O request via the IP network and a file I/O request having a second port number for receiving a file I/O request via the IP network,

wherein the plurality of disk drives are configured into a plurality of volumes, of which a first volume is <u>assigned</u> allocated to store data related to the block I/O request and a second volume is <u>assigned</u> allocated to store data related to the file I/O request,

wherein the block I/O request includes the first port number and the file I/O request includes the second port number,

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Appl. No. 10/020,313 Amendment dated September 12, 2005 Reply to Office Action of June 14, 2005

when an I/O request including the first port number is received at the control unit via the physical input/output port is the block I/O request including the first port number, the control unit performs a first operation, corresponding to the first port number, for storing data in the first volume,

when an I/O request including the second port number is received at the control unit via the physical input/output port is the file I/O request including the second port number, the control unit performs a second operation, corresponding to the second port number, for storing data in the second volume.

- 36. (Previously Presented) A storage system according to claim 35, wherein the block I/O request has an IP packet that includes the first port number and first information including an address in the first volume.
- 37. (Previously Presented) A storage system according to claim 35, wherein the file I/O request has an IP packet that includes the second port number and second information including file data.
- 38. (Currently Amended) A storage system according to claim 35, wherein the block I/O request has a TCP packet in which the first port number is included.
 - 39. (Previously Presented) A storage system according to claim 36,

Appl. No. 10/020,313 Amendment dated September 12, 2005 Reply to Office Action of June 14, 2005

wherein the IP packet encapsulates a TCP packet in which the first port number is included.

- 40. (Currently Amended) A storage system according to claim 35, wherein the first volume and the second volume are concurrently allocated assigned.
- 41. (Currently Amended) A storage system according to claim 35, wherein the control unit maps relationships between <u>logical</u> address<u>es</u> of the each volumes and physical addresses of the disk drives to which data is to be stored data.
- 42. (Currently Amended)) A storage system coupled to an IP network, the storage system comprising:
 - a physical port coupled to the IP network;
 - a control unit coupled to the physical port; and
 - a plurality of disk drives coupled to the control unit,

number and first information wherein first and second port number re assigned to the physical port, the first port number for receiving a block I/O request from a first processor via the IP network and thea file I/O request having a second port number

4

Appl. No. 10/020,313

Amendment dated September 12, 2005

Reply to Office Action of June 14, 2005

and second information for receiving a file I/O request from a second processor via the IP network,

wherein the plurality of disk drives are configured into a plurality of volumes, of which a first volume is <u>assigned</u> to store data related to the block I/O request and a second volume is <u>assigned</u> to store data related to the file I/O request, and wherein the block I/O request includes the first port number and a first information and the file I/O request includes the second port number and a second information,

when an I/O request including the first port number is received <u>fromform</u> the first processor at the control unit via the physical port, wherein, the control unit performs a first operation, <u>corresponding to the first port number</u>, for storing data in the first volume,

when an I/O request including the second port number is received from the second processor at the control unit via the physical port, the control unit performs a second operation, corresponding the second port number, for storing data in the second volume.

- 43. (Currently Amended) A storage system according to claim 42, wherein the block I/O request has an IP packet that includes the first port number and the first information including an address in the first volume.
 - 44. (Currently Amended) A storage system according to claim 42,

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wherein the file I/O request has an IP packet that includes the second port number and the second information including file data.

- 45. (Currently Amended) A storage system according to claim 42, wherein the block I/O request has <u>a TCP</u> packet in which the first port number is included.
- 46. (Previously Presented) A storage system according to claim 43, wherein the IP packet encapsulates a TCP packet in which the first port number is included.
- 47. (Currently Amended) A storage system according to claim 42, wherein the first volume and the second volume are concurrently allocated assigned.
- 48. (Currently Amended) A storage system according to claim 42, wherein the control unit maps relationships between <u>logical</u> address<u>es</u> of the each-volumes and physical location of the disk drives to which data is to be stored.

49-55. (Canceled)

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interpretation

Appl. No. 10/020,313 Amendment dated September 12, 2005 Reply to Office Action of June 14, 2005

56. (Currently Amended) A storage system to be coupled to an IP network, said storage system comprising:

a physical port to be coupled to the IP network;

a control unit coupled to the physical port; and

a plurality of disk drives to be coupled to the control unit;

wherein first and second port numbers are assigned to the physical port is accessible by a first IP packet having a, the first port number for receiving a first IP packet via the IP network and a second IP packet having athe second port number for receiving a second IP packet via the IP network,

wherein the plurality of disk drives are configured into a plurality of volumes, of which a first volume is <u>assigned</u> allocated to store data related to the first IP packet and a second volume is <u>assigned</u> allocated to store data related to the second IP packet,

wherein the first IP packet includes the first port number and block data, and the second IP packet includes the second port number and file data,

when the first IP packet is received at the control unit via the physical port, the control unit performs a first operation, corresponding to the first port number, for storing the block data in the first volume,

when the second IP packet is received at the control unit via the physical port, the control unit performs a second operation, corresponding to the second port number, for storing the file data in the second volume.

7

- 57. (Currently Amended) A storage system according to claim 56, wherein the first IP packet has <u>a</u> TCP packet in which the first port number is included.
- 58. (Currently Amended) A storage system according to claim 56, wherein the second IP packet encapsulates a TCP packet in which the second port number is included.
- 59. (Previously Presented) A storage system according to claim 56, wherein the control unit transforms the file data into block data for storing in the second volume.
- 60. (New) A storage system according to claim 35, wherein a format of file I/O related to the file I/O request is on the basis of NFS protocol, and the second operation is performed on the basis of the NFS protocol.
- 61. (New) A storage system according to claim 35, wherein a format of the block I/O request is on the basis of SCSI protocol, and the first operation is performed on the basis of the SCSI protocol.
 - 62. (New) A storage system according to claim 42,

Appl. No. 10/020,313 Amendment dated September 12, 2005 Reply to Office Action of June 14, 2005

wherein a format of the file I/O request is on the basis of NFS protocol, and the second operation is performed on the basis of the NFS protocol.

63. (New) A storage system according to claim 42,

wherein a format of the block I/O request is on the basis of SCSI protocol, and the first operation is performed on the basis of the SCSI protocol.

64. (New) A storage system according to claim 56,

wherein a format of the file data is on the basis of NFS protocol, and the second operation is performed on the basis of the NFS protocol.

65. (New) A storage system according to claim 56,

wherein a format of the block data is on the basis of SCSI protocol, and the first operation is performed on the basis of the SCSI protocol.